Application No.: 09/700,372 Docket No.: 21625-00032-US

In the Claims

Claims 1, 7, 8 and 22 are currently amended.

1. (currently amended) A method for manufacturing an article, comprising:

providing a polymer-based material (1), wherein the material (1) is a multi-component polymer-based material comprising ingredients (1a, 1b) that are individually heated by a heating unit and mixed together;

spraying the polymer-based material in an electrically charged state into an electrical field (E) onto a three-dimensional[;

providing a] mould (2)[, wherein one or more positions of the mould is set at an electrical potential;

contacting the electrically charged material to the mould] with a single-spray processing unit to form a coating on the mould, which is not grounded; and

removing the article from the mould (2) following sufficient curing of the coating.

2. (canceled)

3. (previously amended) A method as set forth in claim 1, further comprising treating surface of said mould (2) with one or more surface-tension regulating surfactants selected from a group consisting of a silicon-based, a polyolefine-based and a corresponding agent to facilitate demoulding/stripping of the article from the mould (2), wherein the surface tension of the material (1) is adjusted relative to the surface tension of the mould.

4. (previously amended) A method as set forth in claim 1, wherein the article is an elastic product selected from a piece of clothing, a glove, or a condom.

5. (previously amended) A method as set forth in claim 1 wherein the material (1) is a multi-component polymer-based material comprising ingredients (1a, 1b) that are individually heated by a heating unit, mixed together, and charged electrically.

6. (previously amended) A method as set forth in claim 1, wherein a desired wall thickness of the article is achieved at any given point on the surface of the mould by providing the mould (2) with two or more treatment blocks (Li), which are set at voltage levels substantially different from each other.

7. (currently amended) A method as set forth in claim 1, wherein the spraying the polymer-based material comprises one or more changes in process parameters, the process parameters selected from the group consisting of volume flow of the polymer-based material, viscosity of the polymer-based material or a component thereof, the electrical field (E), and the voltage level in the one or more treatment blocks (Li) of the mould (2).

8. (currently amended) An apparatus for manufacturing a thin-walled article, the apparatus comprising:

[one] two or more reservoirs that contain a polymer-based material that comprises one or more components;

one or more pressurizing units to adjust the pressure of the polymer-based material;

a single-processing unit to electrically charge the polymer-based material and form a spray of electrically charged material onto a three-dimensional mould, which is not grounded; and

a control unit to adjust one or more process parameters.

9. (previously amended) An apparatus as set forth in claim 8, wherein the apparatus further comprises a heating unit (01) to heat the polymer-based material (1).

10. (previously amended) An apparatus as set forth in claim 8 wherein the mould (2) comprises at least two treatment blocks (Li) whose voltage levels are independently adjustable.

11. (canceled)

12. (canceled)

13. (previously amended) A method as set forth in claim 3, wherein the article is an elastic product selected from a piece of clothing, a glove, or a condom.

14. (canceled)

15. (previously amended) A method as set forth in claim 3, wherein the material is a multi-component polymer-based material comprising at least two ingredients that are individually heated by a heating unit, mixed together, and charged electrically.

16. (canceled)

17. (previously amended) A method as set forth in claim 3, wherein a desired wall thickness of the article is achieved at any given point on the surface of the mould by providing the mould with two or more treatment blocks, which are set at voltage levels substantially different from each other.

18. (previously amended) A method as set forth in claim 4, wherein a desired wall thickness of the article is achieved at any given point on the surface of the mould by providing the mould with two or more treatment blocks, which are set at voltage levels substantially different from each other.

19. (previously amended) A method as set forth in claim 5, wherein a desired wall thickness of the article is achieved at any given point on the surface of the mould by providing the mould with two or more treatment blocks, which are set at voltage levels substantially different from each other.

20. (canceled)

21. (previously added) The apparatus of claim 8, wherein the polymer-based material includes at least two components which are mixed in the processing unit.

22. (currently amended) The apparatus of claim 8, wherein the one or more process parameters is selected from the group consisting of volume flow of the polymer-based material, viscosity of the manufacturing material or a component thereof, the electrical field, and voltage level in the one or more treatment blocks of the mould[(2)]].